



Research Article

Sustained Deviance and Educational Disruption: Post-Pandemic Behavioral Trajectories in Urban Bangladesh

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Email: b180404009@soc.jnu.ac.bd**Article History****Received:** March 15, 2025**Accepted:** March 30, 2026**Published:** May 1, 2026**Citation**

Billah, M., Ridoy, M., & Monna, S. A. (2026).

Sustained Deviance and Educational

Disruption: Post Pandemic Behavioral

Trajectories in Urban Bangladesh.

International Social Research Nexus (ISRN),

2(2), 1-12.

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Abstract

The COVID-19 pandemic led to prolonged school closures in Bangladesh, disrupting children's educational routines and social interactions. In Dhaka City, limited empirical research has examined how these closures affected students' behavioral patterns beyond academic loss. This study investigates behavioral, digital, and educational changes among school-going children during the post-pandemic period. Guided by Hirschi's Social Bond Theory, the research examines how weakened attachment, commitment, involvement, and belief structures during school closure influenced behavioral outcomes. Methodologically, a quantitative descriptive design was employed. Data were collected from 60 parents of students from three secondary schools in Dhaka using a structured questionnaire. Data were analyzed using SPSS 25 through frequency distribution and percentage analysis. Findings indicate that 73.33% of children experienced noticeable behavioral changes. Approximately 66.67% had access to social media and online gaming, contributing to increased screen dependency. Drug use was reported among 13.33% of children, while 16.7% were involved in physical violence. Additionally, 26.7% admitted to breaking social norms. Educationally, 81.67% of respondents reported academic disruption, with decreased concentration (38.33%) and reduced reading motivation (26.67%) being the most prominent effects. The findings suggest that weakened social bonds during school closure increased vulnerability to behavioral shifts, although most children did not engage in severe deviance. The study recommends structured school-based counseling programs, parental digital monitoring and guidance, blended learning strategies, and community engagement initiatives to support behavioral readjustment. Longitudinal research is recommended to assess long-term post-pandemic behavioral consequences.

Keywords

Behavioral Changes, Deviance, COVID-19, School Closure, Bangladesh.

1. Introduction

Schools play a vital role in shaping children's cognitive, emotional, and social growth (Annajmi, 2024; Billah, 2021; Khalil et al., 2020). Beyond formal teaching, educational institutions offer structured routines, peer interaction, adult supervision, moral guidance, and involvement in extracurricular activities (Brown & Theobald, 1998; Buzzi et al., 2020). These elements together help regulate behavior and encourage social conformity (Annajmi, 2024; Eshach, 2007). Attending school regularly strengthens discipline, time management, cooperative skills, and adherence to shared norms (Bear

2010; Elias & Schwab, 2013). When these institutional systems are disrupted, children may face instability in both learning and behavior patterns (Khalil et al., 2020; Billah, 2021). The extended school closures during the COVID-19 pandemic severely affected these protective mechanisms (Sharmin et al., 2025; Billah, 2021). In Bangladesh, schools remained closed for an extended period, making it one of the longest continuous disruptions to schooling worldwide (Billah, 2021). Although remote learning options using television, online platforms, and mobile devices were introduced, access to digital resources was unequal (UNESCO, 2020). Many students from low- and middle-income families lacked reliable internet, suitable devices, or supportive learning environments at home (UNESCO, 2020). As a result, children spent more time at home with less academic oversight and limited peer interaction (Viner et al., 2020).

Some studies show that school closures were associated not only with learning loss but also with psychosocial and behavioral consequences (Sharmin et al., 2025; Billah, 2021). Viner et al. (2022) found that prolonged social isolation during lockdowns increased emotional distress, anxiety, and behavioral problems among children and adolescents. Similarly, excessive screen exposure during the pandemic has been linked to reduced attention span, irritability, and aggression (Domingues-Montanari, 2017). Montag and Elhai (2020) argue that pandemic-related restrictions intensified problematic digital technology use, particularly among adolescents who relied heavily on smartphones and social media for social connection.

Recent post-pandemic research suggests that the consequences of these disruptions continue to influence children as they transition into adolescence. Longitudinal studies indicate that while many young people gradually regained social functioning and emotional stability after schools reopened, the process of reintegration has been uneven and shaped by family resources, school support, and social environments (Gatavins et al., 2025). Evidence from reopening studies shows that the restoration of school routines and peer interaction contributed to improvements in children's mental health and social adjustment, highlighting the continued importance of institutional engagement for adolescent development (Ozluk et al., 2024).

However, some studies suggest that pandemic-related disruptions during critical developmental stages altered educational aspirations, school engagement, and sense of belonging even after the reopening of schools (Glick et al., 2025). International assessments further indicate that although students' connection to school declined during the pandemic, recovery has been gradual rather than immediate, suggesting that the social reintegration of young people is an ongoing process (Hammerstein et al., 2025).

Another emerging concern in recent literature relates to whether increased digital technology use during the pandemic represented a temporary adaptation or a more permanent behavioral shift. Studies indicate that prolonged reliance on online communication and entertainment during lockdown normalized higher levels of screen engagement among adolescents, which in some cases persisted even after the return to regular schooling (Shoshani & Kor, 2024). Research has also found that excessive internet use during the pandemic increased the risk of internet addiction and psychological distress among adolescents, suggesting that digital dependency may extend beyond the period of school closures (Md Bukhori & Ja'afar, 2024). These findings imply that the pandemic may have accelerated broader digital transformations in adolescents' daily routines rather than producing purely temporary behavioral habits.

In the Bangladeshi context, most empirical studies have concentrated on academic disruption, digital divide, and mental health stress. While these are critical concerns, comparatively little attention has been given to behavioral transformations such as aggression, dishonesty, substance experimentation, rule-breaking, or early exposure to online risks. Furthermore, limited research has explored these behavioral shifts through a sociological lens that explains how weakened institutional attachment may increase vulnerability to deviance. Urban areas like Dhaka City, characterized by high population density, digital exposure, and socio-economic disparities, require specific investigation.

This study responds to that gap by examining behavioral changes, digital dependency, and educational engagement among school-going children in Dhaka during and after prolonged school closure. By empirically examining these issues within an urban Bangladeshi context, this study contributes to both national policy discourse and broader sociological understanding of institutional disruption and child behavior.

1.1. Objectives of the Study

The broad objective of this study was to analyze how school closure for a certain period, in reference to COVID-19, manipulated the behavior of school-going students.

To get findings, some specific objectives were to

1. Explore the changes in the behavior of the children due to COVID-19.
2. Know the addiction to social media and the internet for COVID-19.
3. Measure the frequency of crime and deviance activities among students.
4. Identify the effects of prolonged school closure on education

1.2. Theoretical Framework

This study is grounded in Travis Hirschi's Social Bond Theory (1969), which posits that conformity to social norms is maintained through strong bonds with institutions like family, school, and community (Hirschi, 1969). Deviance is more likely when these bonds weaken. Hirschi identifies four components of the social bond: attachment, commitment, involvement, and belief (Hirschi, 1969). Attachment refers to emotional closeness with significant others, including teachers and peers. School closures reduced opportunities for such interactions, weakening attachment and informal social control (Catalano & Hawkins, 1996; Henry & Slater, 2007). Commitment involves investment in conventional goals like education; disruption of routines can reduce motivation and future-oriented thinking. Involvement emphasizes participation in structured activities, which limit opportunities for deviance. Prolonged absence from school decreased engagement in organized activities, potentially increasing exposure to unstructured or risky behavior (Maimon & Browning, 2010). Belief reflects acceptance of societal norms, reinforced through schooling. Interruptions may reduce reinforcement of shared values, though family and community may continue to provide stability.

Social Bond Theory does not suggest that weakened bonds automatically cause deviance but indicates increased probability when social ties erode (Hirschi, 1969). Contemporary research supports that strong institutional ties protect against delinquency (Sampson & Laub, 1993; Henry & Slater, 2007). Applying this framework, the study interprets behavioral shifts among urban schoolchildren during prolonged school closures as responses to changes in attachment, involvement, commitment, and normative reinforcement rather than inherent deviance.

However, the relevance of Social Bond Theory extends beyond explaining behavioral disruption during the immediate pandemic period. By 2026, many of the children who experienced school closures during 2020-2022 have transitioned into adolescence and gradually re-entered structured educational environments. The reopening of schools, resumption of peer interaction, and restoration of classroom routines potentially contributed to the gradual rebuilding of social bonds (Rodrigues, 2024). Attachment to teachers and classmates may have been re-established through renewed face-to-face interaction, while commitment to educational goals could recover as students re-engaged with examinations, classroom learning, and future academic aspirations (Rodrigues, 2024). Similarly, involvement in extracurricular activities and supervised school programs likely restored structured daily routines that limit opportunities for deviant behavior. Belief in institutional norms may also have been reinforced through renewed exposure to formal disciplinary structures and social expectations within educational institutions (Rodrigues, 2024).

Nevertheless, sociological life-course perspectives suggest that major disruptions during critical developmental periods can function as turning points that reshape behavioral trajectories (Sampson & Laub, 1993). The prolonged interruption of schooling during the pandemic may therefore represent a temporary disruption for some students but a more lasting developmental shift for others. Students who successfully re-established attachment to school and family institutions may experience behavioral stabilization, whereas those who remained socially disconnected or heavily reliant on unstructured digital environments may continue to exhibit weaker institutional bonds. From this perspective, the present study uses Social Bond Theory not only to explain behavioral changes during school closures but also to explore whether these disruptions created potential turning points in the social development of urban schoolchildren. Understanding how these bonds weaken, adapt, and re-form in the post-pandemic period is therefore central to explaining contemporary patterns of youth behavior in the urban Bangladeshi context.

2. Methodology

2.1. Study Design

This study adopted a quantitative descriptive research design to examine the behavioral and educational impacts of prolonged school closure among school-going children in Dhaka City, Bangladesh. A cross-sectional approach was employed to capture parental assessments of children's behavioral changes following the COVID-19 pandemic. The quantitative approach was considered appropriate because the objective was to measure the prevalence, distribution, and patterns of behavioral outcomes rather than explore in-depth subjective experiences. The study was conducted between February

2023 and June 2023 in three secondary schools located in Dhaka City. Although the data were collected in 2023, the findings should be interpreted as an important empirical baseline for understanding the evolving post-pandemic behavioral context of children in Bangladesh. By 2026, many of the children who experienced school closure during the pandemic will have transitioned into adolescence. Therefore, the present dataset provides a foundational reference point for analyzing how behavioral patterns observed during the immediate post-pandemic period may continue, stabilize, or transform in later years. This contextualization allows the findings to contribute to ongoing discussions regarding the longer-term social and developmental consequences of educational disruption caused by COVID-19.

2.2. Participants and Sampling

The study included 60 parents of school-going children, consisting of 30 male and 30 female respondents. Parents were selected as participants because they were the primary caregivers and closest observers of children's behavior during the extended period of school closure. Since many students were minors, direct data collection from children would have required additional ethical procedures and parental permissions.

Moreover, behavioral changes such as increased screen time, aggression, rule-breaking, and reduced academic engagement were more observable in the home environment. A purposive sampling technique was used to recruit respondents who had children enrolled during the school closure period. Random sampling was not feasible due to limited institutional access following the pandemic, logistical constraints, and the absence of a complete sampling frame of eligible parents. While purposive sampling allowed the researchers to select relevant participants with direct experience of the phenomenon under study, it limits the generalizability of the findings beyond the selected schools.

2.3. Data Collection

Data were collected using a structured questionnaire developed through an extensive review of existing literature on school closures, adolescent behavioral change, and digital dependency. The questionnaire included sections on demographic characteristics, behavioral changes, crime and deviance indicators, social media and internet use, and educational impact. The instrument consisted primarily of closed-ended questions with categorical response options to facilitate quantitative analysis. To ensure content validity, the questionnaire was reviewed by two academic experts in sociology and education.

A pilot test was conducted with ten parents who were not included in the final sample to assess the clarity, consistency, and relevance of items. Based on feedback from the pilot study, minor revisions were made to improve wording and comprehension. Data were collected through face-to-face visits to respondents' homes to enhance response accuracy and minimize misunderstanding of questions.

2.4. Data Analysis

After data collection, responses were coded and entered into SPSS version 25 for statistical analysis. The study primarily employed descriptive statistical techniques, including frequency distribution and percentage analysis, to examine patterns of behavioral and educational changes. Limited cross-tabulation was conducted to explore relationships between selected demographic variables and behavioral outcomes. Given the exploratory nature of the study and the relatively small sample size, advanced inferential statistical tests such as regression or chi-square analysis were not performed. The analysis focused on identifying observable trends rather than establishing causal relationships. Findings were presented systematically in tabular form to ensure clarity and interpretability.

2.5. Limitations

The study has several limitations that should be acknowledged. The sample size of 60 parents is relatively small compared to the broader population of school-going children in Dhaka, and therefore the findings should be interpreted as exploratory rather than representative" (Billah & Khan, 2026). The use of purposive sampling further restricts external validity and generalizability. Additionally, reliance on parental reporting may introduce perception bias or social desirability bias, as parents may underreport or over report certain behaviors. The cross-sectional design also limits the ability to determine

long-term causal effects of school closure. Despite these limitations, the study provides valuable preliminary insights into behavioral patterns within an urban Bangladeshi context.

2.6. Ethical Considerations

Although the researchers' institution did not have a formal ethics review board at the time of conducting the study, all standard ethical principles were strictly maintained. Informed consent was obtained from all participants prior to data collection, and participation was voluntary. Respondents were informed of their right to withdraw from the study at any time without consequence. Confidentiality and anonymity were ensured by excluding identifying information from the dataset and assigning numerical codes to responses.

All collected data were stored securely and used exclusively for academic purposes. Care was taken to design the questionnaire in a manner that minimized psychological discomfort and avoided intrusive or sensitive questioning. The study adhered to established principles of confidentiality, respect, and responsible data management.

3. Results

3.1. Demographic Profile and Economic Condition

Table 1: Percentage Distribution of the Respondents by Demographic Profile and Economic Condition

			Frequency	Total	Percentage	Total
Demographic Profile and Economic Condition	Sex	Male	30	60	50.00	100.00
		Female	30		50.00	
	Level of Education	Primary	18	60	30.00	100.00
		Secondary	30		50.00	
		Tertiary	12		20.00	
	Number of Earner	Less than Two (2)	50	60	83.33	100.00
		Two (2)	7		11.67	
		More than Two (2)	3		5.00	
	Monthly Income	Less than 20000	3	60	5.00	100.00
		21000-40000.	30		50.00	
		More than 40000	27		45.00	
	Monthly Expenditure	Less than 20000	6	60	10.00	100.00
		21000-40000.	37		61.67	

		More than 40000	17		28.33	
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In this research, there were 60 respondents (N=60). The demographic and economic characteristics of the respondents were analyzed based on variables such as sex, education level, number of earners, monthly income, and monthly expenditure. The sample consisted of an equal distribution of males and females, with each group accounting for 50% of the total. This ensured that gender representation did not bias the findings. A significant portion of respondents (50%) attained secondary education, while 30% attained primary, and 20% tertiary level of education. Most households had fewer than two earners (83.3%), while only a small percentage (11.67%) had exactly two earners. Households with more than two earners constituted just 5%. Regarding income levels, half (50%) of the respondents had a monthly income ranging between 21000 and 40000, while 45% earn more than 40,000. Only 5% of respondents earn less than 20,000, suggesting that the majority belonged to a middle-income bracket. Monthly expenditure patterns align closely with income levels. Most respondents (61.67%) spend between 21000 and 40000, while 28.33% had expenses exceeding 40,000. Interestingly, 10% of respondents reported expenditures below 20,000, indicating either lower cost-of-living conditions.

3.2. Behavioral Changes

Table 2: Percentage Distribution by the Behavioral Changes of Students

			Frequency	Total	Percentage	Total
Behavioral Change	Changes in Behavior	Yes	44	60	73.33	100.00
		No	16		26.67	
	Nature of Change	No Changes	16	60	26.67	100.00
		Cheating	5		8.33	
		Fighting	8		13.33	
		Bullying	2		3.33	
		Lying	11		18.33	
		Cheating, Fighting, bullying and Lying	5		8.33	
		Fighting, Bullying and Lying	3		5.00	
		Fighting and Lying	5		8.33	
		Cheating and Lying	5		8.33	
	Decision Making	Yes	12	60	20.00	100.00
		No	48		80.00	
	Break Norms and Values	Yes	16	60	26.67	100.00
		No	44		73.33	
	Parents Assessment	Betterment with Maturity	10	60	16.77	100.00
		Not Harmful for Society	1		1.67	
		Loneliness	5		8.33	
		No assessment	44		73.33	

This table 2 represented data on behavioral changes, decision-making, societal rule-breaking, and parental assessments of behavior. From the table, we had seen that 73.3% of respondents saw behavioral changes among their children, while 26.67% observed no changes. Among those who changed, lying (18.33%) and fighting (13.33%) were the most common behaviors. A small percentage (8.33%) showed multiple problematic behaviors (cheating, fighting, bullying, and lying). In terms of decision-making, only 20% felt they had decision-making control, while 80% did not. This could indicate external influences or lack of autonomy in making choices. Regarding breaking norms and rules, under one-third of total respondents, 26.7% admitted to breaking societal norms, while 73.3% did not. But in the case of parental assessment of behavior, there was a significant gap, as 44 cases lacked assessment. Only 16.77% of parents believed behavior would improve with age, while 8.33% seemed to believe that behavioral changes occur for loneliness, showing emotional factors at play. Surprisingly, just 1.67% thought these behaviors were not harmful to society.

3.3. Measuring Crime and Deviance

Table 3: Percentage Distribution of the Respondents by Measuring Crime and Deviance

			Frequency	Total	Percentage	Total
Crime and Deviance	Addiction of Drug	Yes	8	60	13.33	100.00
		No	52		86.67	
	Types of Drugs	Cigarette	6		10.00	100.00
		Cigarette and cannabis	2		3.33	
		No response	52		86.67	
	Money management for drug	Pocket money	3	60	5.00	100.00
		Given as gift by relative	1		1.67	
		Stealing from home	3		5.00	
		Tiffin food money	1		1.67	
		No response	52		86.67	
	Teasing opposite sex	Yes	14	60	23.33	100.00
		No	46		76.67	
	Gambling	Yes	0	60	0.00	100.00
		No	60		100.00	
	Physical Violence	Yes	10	60	16.70	100.00
		No	50		83.33	
	Parents' Assessment	Harmful for society	3	60	5.00	100.00
		Punished by elder	3		5.00	
		Need of rehabilitation	4		7.00	
		No response	50		83.33	

Table 3 represented data on crime and deviance related information by children of the 60 respondents of this study. From this table it showed that 13.3% were drug addicted where 10% used cigarettes, and 3.33% used both cigarettes and cannabis, 23.3% are involved in teasing opposite sexes and no one was not engaged with gambling. This table also showed, from 60 respondent's views 86.7% children were not drug addicted and 76.7% are not engaged with teasing opposite sexes.

Those who were drug addict funded their drug use through pocket money (5%), stealing from home (5%), gifts from relatives (1.67%), or using food money (1.67%). Again, the table represents that no respondents (0%) admitted to gambling, meaning all 60 individuals (100%) reported not engaging in it. From the total responses, only 16.7% (10 individuals) admitted to engaging in physical violence, while 83.3% (50 individuals) did not. Again, parents' assessment on physical violence- 5% of parents believed their child was harmful to society, 5% had punished them (children), and 7% felt they needed rehabilitation.

3.4. Addiction to Social Media and the Internet

Table 4: Percentage Distribution of the Respondents by Addiction to Social Media and the Internet

			Frequency	Total	Percentage	Total
		Yes	58	60	96.67	100.00

Addiction to Social Media and the Internet	Mobile phone Access	No	2		3.33	
	Type of Mobile Phone					100.00
		Smart phone	56	60	93.33	100.00
		Ordinary	2		3.33	
		Missing	2		3.33	
	Social media Accessibility	Yes	40	60	66.67	100.00
		No	18		30.00	
		Missing	2		3.33	
	Time spent on social media	(1-2) hours	20	60	33.33	100.00
		(3-4) hours	14		23.33	
		(5-6) hours	2		3.33	
		More than 6 hours	2		3.33	
		Missing	22		36.67	
	Online Gaming	Yes	40	60	66.67	100.00
		No	18		30.00	
		Missing	2		3.33	
	Time spent on online gaming	(1-2) hours	12	60	20.00	100.00
		(3-4) hours	19		31.67	
		(5-6) hours	7		11.67	
		More than 6 hours	2		3.33	
		Missing	20		33.33	
	Addiction of Adults Film	Not interested to talk about it	11	60	18.33	100.00
		Don't know about it	15		25.00	
		Yes	4		6.67	100.00
		No	30		50.00	

The table 4 showed the data about addiction of social media and internet among the children. We saw that 96.67% of children of the respondents had mobile phone access where 93.33% users had an access of smartphones that indicated widespread access to advanced digital technology. Those who had access of mobile phone 66.67% had social media account. Time spent on social media varies, such as 33.33% used social media for 1-2 hours, while a small group (3.33%) spent more than 6 hours. Again, 66.67% of the children participate in online gaming, while 30% did not. Time spent on gaming also varies, with 31.67% playing for 3-4 hours daily. The consumption of adult film and discuss about it was not very common in our society. That is why 18.33% were not interested in discussing it and another 25% claimed they did not know about it. Only 6.67% admitted to watching adult films.

3.5. Effects on Education

Table 5: Percentage Distribution of the Respondents by Effects on Education

			Frequency	Total	Percentage	Total
Effects on Education	Impact on Education	Yes	49	60	81.67	100.00
		No	11		18.33	
	Impacts due to Covid-19	Decreased concentration	23	60	38.33	100.00
		Don't want to read	16		26.67	
		Less reading time	7		11.67	
		Less interest about other activities	3		5.00	
		No effect	11		18.33	
	Reading time per day	(1-2) hours	29	60	48.33	100.00
		(3-4) hours	18		30.00	
		(5-6) hours	10		16.67	
		More than 6 hours	3		5.00	
	Situation of Present Study	Good	25	60	41.67	100.00
		Moderate	24		40.00	
		Worst	11		18.33	
	Last Examination	Pass	46	60	76.67	100.00
		Fail	14		23.33	

The table 5 presented data on the effects of COVID-19 on the education of children. We observed that a greater number of respondents (81.67%) reported an impact on their children's education, while 18.33% did not. The high percentage suggested that education was significantly affected, likely due to changes in learning environments and study habits. Those who faced impacts 38.33% experienced decreased concentration, indicating difficulties in maintaining focus, 26.67% reported not wanting to read, which could suggest a lack of motivation or mental fatigue, 11.67% had less reading time, possibly due to distractions at home, and 5% showed less interest in other activities, suggesting that the pandemic might have led to overall disengagement.

The majority (48.33%) read for 1-2 hours daily, while 30% read for 3-4 hours, 16.67% read for 5-6 hours, and only 5% read for more than 6 hours. This distribution suggested that most students maintained a moderate reading habit, but intensive studying was less common. For these reasons, only 41.67% rated their current study situation as good, while 40% described it as moderate, and 18.33% considered it the worst, indicating significant academic struggles. But 76.67% passed their last examination, while 23.33% failed.

4. Discussion

The findings of this study show that prolonged school closures during the COVID-19 pandemic had significant effects on the behavioral, educational, and digital engagement of urban schoolchildren in Dhaka. Many respondents (73.33%) reported behavioral changes, including lying, fighting, and minor rule-breaking. According to Hirschi's Social Bond Theory (1969), such behaviors can arise when attachment, commitment, involvement, and belief in conventional institutions

weaken. Schools provide structured routines, peer interaction, adult supervision, and reinforcement of social norms, which are critical for regulating behavior (Catalano & Hawkins, 1996; Henry & Slater, 2007; Billah, 2021). The absence of these institutional structures likely contributed to diminished attachment and involvement, consistent with international findings showing that school closures and social isolation increased emotional and behavioral problems among children (Viner et al., 2022; Domingues-Montanari, 2017).

The study observed moderate engagement in deviant behaviors, such as drug use (13.33%), teasing the opposite sex (23.33%), and physical aggression (16.67%), while gambling was absent. This indicates that although weakened social bonds increase susceptibility to minor deviance, internalized belief systems and parental supervision can still mitigate severe misconduct (Sampson & Laub, 1993). Comparable research in European and South Asian contexts has documented that adolescents with weaker institutional attachment and low parental monitoring were more likely to experiment with substances or display aggression (Elgar et al., 2020; UNESCO, 2020; Billah, 2021). Importantly, behaviors such as lying (18.33%) and physical aggression (16.7%) should not be interpreted merely as temporary disruptions associated with pandemic isolation. Rather, they represent early manifestations of weakened social regulation that may continue to influence interpersonal behavior among adolescents who experienced prolonged institutional disruption during formative developmental years. From a sociological perspective, these behaviors function as indicators of shifting socialization patterns, where informal peer influence and digital environments increasingly compete with traditional institutions such as schools in shaping behavioral norms.

Digital engagement was nearly universal, with 93.33% using smartphones and 66.67% engaged in social media or online gaming. Hirschi (1969) emphasizes that involvement in structured conventional activities protects against deviance, and unmonitored digital time may substitute for these activities, increasing exposure to risky behaviors. Similar trends were reported internationally, where prolonged screen time and reliance on social media during the pandemic were associated with behavioral problems, attention deficits, and emotional dysregulation (Montag & Elhai, 2020; Domingues-Montanari, 2017).

However, the level of digital engagement observed in this study should not be interpreted solely as a short-term response to pandemic conditions. Instead, it may represent a structural shift in the everyday social environment of urban youth. The finding that 66.67% of children actively engaged in social media and online gaming indicates the normalization of digitally mediated interaction as a central component of youth culture in Dhaka. Even after schools reopened, digital platforms continue to shape communication, entertainment, and peer interaction, suggesting that the behavioral patterns documented in 2023 reflect an emerging long-term transformation in the social fabric of urban adolescence rather than a temporary adaptation to crisis conditions.

Educational impacts were also evident, with 81.67% of respondents reporting reduced concentration, less reading, and lower motivation. Most students read for 1–2 hours daily, and 23.33% failed their last examination. These patterns reflect a weakening of commitment to conventional goals, one of the core components of Social Bond Theory. Previous studies in Bangladesh and other low- and middle-income countries reported similar academic disruptions, especially for students lacking access to digital learning resources or supportive home environments (UNESCO, 2020; Billah, 2021).

From a broader sociological perspective, these academic challenges may also signal longer-term changes in learning behavior and educational engagement among post-pandemic cohorts. As digital media increasingly competes for students' attention, traditional learning routines may require substantial institutional adaptation. The behavioral and educational patterns documented in this study therefore provide an important baseline for understanding how pandemic-era disruptions may continue to influence youth development and educational trajectories in Dhaka in the years following the crisis.

Taken together, the findings suggest that the patterns observed in 2023 should not be viewed as outdated or temporary anomalies. Rather, they represent early empirical evidence of an ongoing transformation in the socialization processes of urban youth in Bangladesh. The expansion of digital environments, the partial weakening of institutional routines, and the reconfiguration of peer interaction collectively indicate that the pandemic may have accelerated longer-term social changes already underway in rapidly urbanizing cities like Dhaka. Consequently, the behavioral patterns identified in this study remain highly relevant for understanding the present and future dynamics of youth behavior, institutional attachment, and social regulation in the post-pandemic era.

5. Conclusion and Policy Implications

This study explored how prolonged school closures during the COVID-19 pandemic influenced the behavior, digital engagement, and academic experiences of school-going children in Dhaka. The findings show that the interruption of regular school routines was associated with noticeable behavioral changes, increased screen exposure, greater dependence on social media and gaming, and reduced concentration in academic tasks. Although most students continued to follow social norms and successfully progressed through examinations, the results suggest that the pandemic weakened several elements of Hirschi's Social Bond Theory, particularly attachment to teachers and peers, commitment to educational goals, and involvement in structured school activities. These disruptions contributed to a temporary instability in students' behavioral and learning patterns.

At the same time, the study indicates that these patterns should not be interpreted merely as short-term responses to the pandemic. Instead, they may reflect broader shifts in how young people interact socially, learn digitally, and engage with educational institutions in the post-pandemic context. Therefore, recovery efforts need to focus not only on academic performance but also on rebuilding social connections and supportive learning environments. Schools can play an important role by strengthening peer interaction, offering counseling and extracurricular activities, and creating opportunities for meaningful student participation. Similarly, parents and caregivers may benefit from guidance on balancing digital engagement with educational and recreational activities at home. Through coordinated efforts among schools, families, and policymakers, it is possible to reinforce protective social bonds and support students' long-term academic and social development in the years following the pandemic.

Declarations

Author(s) Contributions

Conceptualization: Mutasim Billah, MD Ridoy

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Analysis: Mutasim Billah, MD Ridoy

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Funding

No funding from any external sources

Conflict of Interest

There is no conflict of interest.

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